SALTON SEA ADVISORY COMMITTEE MEETING

January 31, 2006
9:30 – 3:30
Sacramento, CA

Welcome and Introductions

Mike Chrisman, Secretary for Resources, welcomed the Advisory Committee members and led introductions of those present (see attached list).

Updates from the Resources Agency

Secretary Chrisman noted that the fifth round of public meetings was recently held and asked Dale Hoffman-Floerke, Department of Water Resources (DWR), to provide an update on the meetings. Ms. Hoffman-Floerke noted that the public meetings were held in Palm Desert, Bombay Beach, Brawley and Salton City on January 18 and 19. The meeting presentation followed the materials presented at the December 8, 2005 Committee meeting. Overall, the meetings were well attended, and the local communities were engaged at the meetings, asking numerous questions and providing comments. In general, the public is interested in maintaining the whole Sea, and expressed a general preference for the Import/Export alternative. At both the Salton City and the Palm Desert meetings, numerous members of the public requested that the Salton Sea Authority's (SSA's) Revitalization Plan (formerly called the North Lake Plan) also be considered in the State's process. Ms. Hoffman-Floerke noted that the public outreach meetings provide valuable input to the Project and the continued participation of the public at these meetings is appreciated.

Public Comments

The following public comments were provided:

- Patrick Maloney, Imperial Group, provided a copy of a letter addressed to Secretary Chrisman regarding the Restoration Plan (Mr. Maloney noted that this letter will also be available on the Imperial Group's website at: http://www.imperialgroup.info/). Mr. Maloney presented an overview of the letter and requested that the Resources Agency consider the Imperial Group's Concentric Lakes concept in the State's process.

- A resident of Desert Shores noted that there is concern that the State is not considering the people that live around the Sea. The notices for the public outreach meetings stated that a variety of State and Federal representatives supported the State's outreach meetings, but none of the representatives attended the Salton City meeting. In addition, some of the information and specifically, the population information in the "Salton Sea Reference Information" book is outdated.

In response, Secretary Chrisman noted that the Resources Agency appreciates the public's attendance at the outreach meetings and values the public's input into the process. The Resources Agency has made every attempt to make the process as open and inclusive as possible. However, the process does follow the Project's implementing legislation and California Environmental Quality Act (CEQA) requirements, and restoration of the Sea will need to balance both ecosystem and economic concerns.

- A resident of West Shores noted that the public was unanimous in its desire to have the SSA's Revitalization Plan be considered in the State's process. The North Lake Combined alternative, as described in the State's process, is close to the SSA's plan, but is lacking some critical components. The residents around the Sea would like to see as large a waterbody as possible. Future inflows to the Sea are important and The Metropolitan Water District of Southern California (MWD) should drop its water right applications on the New and Alamo Rivers. In addition, the State should seek to stop all future water transfers from Imperial County.

- A resident of Desert Shores noted that air quality needs close consideration in the State's process. Dust from newly exposed seafloor areas can have detrimental human health effects.

Update on QSA Implementation

Kim Nicol, Department of Fish and Game (DFG), provided an update on the implementation of the Quantification Settlement Agreement (QSA) mitigation measures. Ms. Nicol noted that the mitigation measures are in various stages of implementation, with the exception of the playa emission measures as the Sea has not yet receded. A Planning Agreement for the Natural Community Conservation Plan (NCCP) has been prepared and was recently sent out for public review and comment. The NCCP is a plan that covers species that are not listed under the Federal or State Endangered Species Acts but that could be affected during the 75-year water transfer. DFG is working with the NCCP partners to finalize the Planning Agreement and move forward with preparation of the NCCP.

Update on US Bureau of Reclamation Activities

Mike Walker, U.S. Bureau of Reclamation (Reclamation), provided an update on Reclamation's Feasibility Study. Reclamation is finalizing the Phase I document and is continuing to revise and analyze a short list of alternatives. Reclamation is working in close coordination with the State and the SSA, however, the objectives of each of the studies are slightly different, which may lead to similar, although slightly different results. Mr. Walker noted that the objectives of Reclamation's Feasibility Study are close to those described in the 1998 Salton Sea Reclamation Act.

Over next few months, Reclamation will continue to revise the alternatives, develop evaluation criteria to rank the alternatives, and select a preferred alternative. Reclamation will continue to coordinate closely with the State, the SSA, and the Tribe

(via the SSA). Reclamation will consider the SSA's Revitalization Plan as part of the Feasibility Study. Reclamation anticipates submitting its Final Report to the Salton Sea Congressional Task Force at the end of this year.

Based on a question from a Committee Member, it was noted that Dr. Geoff Schladow, University of California at Davis, has completed a one-dimensional model of the Salton Sea. Dr. Schladow is now working with the State to prepare a more comprehensive, three-dimensional (3-D) model. Reclamation is awaiting the completion of this 3-D model to conduct its hydrogen sulfide analysis.

Based on a question from a Committee Member, Mr. Walker noted that Reclamation is continuing to look into the possibility of a federal loan guarantee for the SSA's Revitalization Plan. Reclamation currently does not have the authorization to provide a loan guarantee, however, the possibility of other federal agencies or Congressional authorization is being considered.

Update on Salton Sea Authority Activities

Gary Wyatt, Chairman of the Salton Sea Authority (SSA), provided an update on the development of the SSA's Revitalization Plan.

Mr. Wyatt noted that the SSA Board of Directors unanimously decided that it cannot accept the State's inflow assumptions. Mr. Wyatt noted that the State's future average annual inflow assumption of 650,000 acre-feet is a "complete non-starter", and that a future average annual inflow assumption of 800,000 acre-feet is more reasonable. A Committee member questioned the 800,000 acre-feet per year number. Based on prior SSA presentations and materials, the SSA was assuming future inflows of 700,000 to 750,000 acre-feet per year, which were not that different from the State's values.

Gwen Buchholz, CH2M HILL, provided a brief overview of the State's inflow projections and noted that there are two timeframes over which inflows should be considered—the entire Project period or 2003 to 2077, and the Project "operational period" of 2018 to 2077. The Project's operational period includes the time for which Project facilities are anticipated to be constructed and operational. If considering inflows over the Project period (2003 to 2077), the average annual inflow was estimated to be 795,000 acre-feet and the 80-percent exceedance inflow was estimated to be 737,000 acre-feet (i.e., inflows are estimated to be 737,000 acre-feet or greater 80 percent of the time, and less than this amount 20 percent of the time). If considering inflows over the operational period (2018 to 2077), the average annual inflow was estimated to be 717,000 acre-feet and the 80-percent exceedance inflow was estimated to be 650,000 acre-feet. The "design" inflow or the inflow amount for which Project facilities are designed around, depends on the acceptable risk of failure. The State is using the 80-percent confidence level for its inflow assumptions to minimize the risk of failure.

Mr. Enzweiler, Executive Director of the SSA, noted that the operational period (2018 to 2077) is the appropriate timeframe to use; however, the SSA used a slightly different

approach than the State to develop inflows. In addition, the SSA has proposed a no-diminution in supply agreement with IID, in that the Restoration Project would be given priority over future water transfers. Mr. Wyatt also noted that the State and the SSA also differ in how the inflows would be used.

Ms. Hoffman-Floerke noted that the State's inflow values are a result of the efforts of the Inflows Work Group. The Work Group spent substantial time addressing the issue and developing assumptions that could be supported by the group. The State is being conservative because inflows are a main component in the design and success of the Project. Many Committee members voiced their support for the efforts and results of the Inflows Work Group. The future inflows are projections of what is reasonably expected to occur in the future and should not be viewed as a guarantee.

Speaking on behalf of Imperial County, Mr. Wyatt noted that the County Board of Supervisors has rejected the State's existing range of alternatives because they do not provide benefits to the local communities and do not provide a balance of the needs of people and needs of the environment/ecosystem. Various Committee members noted that air quality is a major and very expensive component of each alternative, which provides benefits to the local community and seeks to balance the needs of the people and the ecosystem. Mr. Wyatt agreed that air quality is a major component, but noted that there is disagreement on how to address air quality concerns, and specifically, the SSA believes that there are ways to control playa emissions without using water. A Committee member requested that the SSA work with the Air Quality Work Group to discuss the feasibility of different playa control measures.

Mr. Wyatt noted that local support is critical for implementation of any plan and the State should consider the SSA's plan, which is supported by the local community and the Board of Supervisors. A Committee member noted that some aspects of the SSA's Revitalization Plan, such as currently proposed extent of development around the Sea, may not be consistent with the objectives of the respective processes. Mr. Wyatt indicated that the SSA has modified its plan over time, and there is a possibility to make additional changes. Secretary Chrisman asked the Committee to consider inclusion of the SSA's plan in the State process.

Update on Project Status

Gwen Buchholz, CH2M HILL, provided an update on the Project status. Several work group meetings have been held since the December 8, 2005 Advisory Committee Meeting. An Initial Draft Inflows Report has been prepared and is currently being reviewed by the Inflows/Modeling Work Group. In addition, the existing conditions and No Action Alternatives descriptions should be available for review by the Committee Members shortly. The Programmatic Environmental Impact Report PEIR (PEIR) and Ecosystem Restoration Study (ERS) are under preparation and preliminary sections should be available in March.

Based on a question from a Committee Member, it was noted that the financing plan will be prepared after completion of the Draft PEIR. Based on a question from a Committee Member, Secretary Chrisman noted that the Salton Sea restoration is being considered among various other projects in the Ecosystem Restoration component of the Governor's current infrastructure bond.

Updated Inflows Assumptions

Armin Munevar, CH2M HILL, provided an update on the inflow assumptions. A draft report on the inflow assumptions was recently released for comment by the Inflows Work Group. The report will be revised based on comments received and will be available for the Advisory Committee's review shortly.

The Inflows Work Group has met since May of 2005 to discuss historical and future inflows to the Sea. As part of this effort, three separate hydrologic scenarios have been developed—historical conditions (1950 to 2002), No Action Alternative-CEQA Conditions (2003 to 2077), and No Action Alternative-Variability Conditions (2003-2077). These three hydrologic scenarios are described in more detail below.

- **Historical Conditions (1950 to 2002)**—This scenario is comprised of measured and estimated inflows from 1950 to 2002 along with revised inflows from Mexico and local watersheds, revised long-term evaporation estimates, and an estimation of the magnitude of salt removal (precipitation) at the Sea. Inflows under Historical Conditions were estimated to be 1.3 million acre-feet per year.

- **No Action Alternative-CEQA Conditions (2003 to 2077)**—This scenario provides the conditions required under CEQA. Changes in inflows due to reasonably foreseeable actions and approved projects, such as the Mexicali Wastewater Treatment Plants and power plants and the Coachella Valley Water Management Plan, were included. Inflows under the No Action Alternative-CEQA Conditions were estimated to be 965,000 acre-feet per year from 2003 to 2077, and 922,000 acre-feet per year over the Project's operational period of 2018 to 2077.

- **No Action Alternative-Variability Conditions (2003-2077)**—This scenario was included to account for uncertainty in future inflows that is not accounted for in the No Action Alternative-CEQA Conditions. This scenario includes a variety of potential future actions that may affect inflows, including increased water use and reuse in the Imperial, Coachella and Mexicali valleys, improved on-farm water use efficiency, changes in inflows due to water quality management actions, and climate change. Under this scenario, a stochastic approach was used to bracket the full range of possible future inflows. Inflows under the No Action Alternative-Variability Conditions were estimated to be 795,000 acre-feet per year from 2003 to 2077, and 717,000 acre-feet per year over the Project's operational period of 2018 to 2077. The inflow values that were equal to or exceeded 80 percent of the time (the 80-percent exceedance) are 737,000 acre-feet per year from 2003 to 2007, and 650,000 acre-feet per year over the Project's operational period of 2018 to 2077. The 80-Percent

inflow value over the Project's operational period is being used for sizing and placement of large infrastructure.

A Committee member requested that climate change be considered in more than just the No Action Alternative-Variability Conditions scenario. The Committee briefly discussed climate change, its potential implications to the Salton Sea, and the available information at the regional and sub-regional level. Based on a question from a Committee member, Mr. Munevar noted that effects of more frequent and/or increased wind velocities due to climate change was not included in the analysis, but will be discussed by the Inflows Work Group.

Habitat Objectives for the Final Alternatives

David Christophel, CH2M HILL, provided an update on the habitat objectives and the progress of the Habitat Work Group. The overall habitat goals are framed by the Project's implementing legislation and the need to protect listed species in the Project area. The Project has three main habitat objectives (1) provide pupfish connectivity, (2) maintain fish community to support fish-eating birds, and (3) retain historical diversity and levels of fish and wildlife.

Based on a question from a Committee member, it was noted that pupfish connectivity between drains should be maintained to increase genetic diversity among the pupfish populations. All of the drains are currently connected to the Sea, however as the salinity of the Sea increases, pupfish may no longer be able to use the Sea to get from one drain to another.

It was noted that deeper areas can be incorporated into the saline habitat complex to maintain a fish community for fish-eating birds. Mr. Christophel noted that the saline habitat complex would be similar to the San Francisco Bay Salt Ponds, which support a similar variety, although not all of the target species.

With regard to the amount of habitat needed to maintain historical diversity and levels of fish and wildlife, the 38,000 wetted acres historically available at the Sea includes the area from the edge of the shoreline out about 1 kilometer. This value is intended to provide a quantitative measure for achieving the Project goals, however, habitat quality is also an important factor in maintaining historical diversity and levels.

Based on a question from a Committee member, it was noted that historical and current use of the Sea by indigenous people will be included in the PEIR.

Water Treatment Assumptions

Gwen Buchholz, CH2M HILL, provided an overview of the water quality management assumptions. The two main constituents of concern are phosphorous and selenium. Other constituents are under consideration, but are not expected to be critical to habitat success.

With regard to phosphorous, based on historical studies of the chemistry and limnology of the Sea, high phosphorous loading to the sea plays a larger role in eutrophication of the Sea than high nitrogen loading. The Project will assume continued implementation of the sediment-silt Total Maximum Daily Load (TMDL), which will help to reduce phosphorous loading to the Sea. However, ways to control phosphorous loading will be evaluated, as the sediment-silt TMDL may not reduce loading to the target level.

Based on a question from a Committee member, it was noted that meeting the Project's water quality goals for different uses would likely restore beneficial uses as designed by the Regional Water Quality Control Board and provide the basis for removing the Sea from the Clean Water Act Section 303(d) list for nutrients. However, other water quality concerns would need to be addressed. In addition, the Sea is listed for selenium based on bioaccumulation concerns, not concentration; therefore reducing the concentration of selenium into the Sea may not address the overall concern.

Based on a question for a Committee member, it was noted that re-mobilization of salts and other constituents of concern is being evaluated.

Revised Descriptions of Range of Alternatives

Gwen Buchholz and Darryl Hayes, CH2M HILL, provided an overview of the revised range of alternatives. Ms. Buchholz noted that the range of alternatives is the same as what was described at the December 8, 2005 Committee meeting except that the Minimal Barrier alternatives has been renamed to the Maximum Saline Habitat Complex, and one alternative has been added, the Minimal Infrastructure with Saline Habitat Complex. The potential phasing discussed in the presentation is based on the Scenario 1, fast-track permitting and compliance schedule (discussed below). Permitting, compliance and construction would take additional time under a more traditional schedule. A summary of the discussion on the revised range of alternatives is provided below.

- **Phasing Timelines**—To provide bookends for potential construction timelines, Ms. Buchholz provided an overview of two potential phasing scenarios. Scenario 1 follows a fast-track permitting/compliance scenario, and assumes that no additional studies would be needed for permitting or quarry development. Under Scenario 1, the construction contract would be awarded in about 2010 and major construction would be completed by 2018. Scenario 2 follows a more traditional permitting and compliance scenario, and assumes that additional studies would be needed for permitting and quarry development along with an extended construction timeline for compliance with air quality regulations. Under Scenario 2, the construction contract would be awarded in about 2014 and major construction would be completed sometime after 2030. The Committee discussed the two scenarios and various Committee members noted that Scenario 2 is more realistic than Scenario 1. A Committee member suggested that recent, comparable Projects be considered as possible examples for phasing. It was also noted that different alternatives may have different permitting/compliance and construction timelines.

The Committee also discussed the need for protection or replacement of habitat during the construction timeframe, and a few members requested that this topic be addressed in more detail.

- **Additional Alternative, Minimal Infrastructure with Saline Habitat Complex—** The Minimal Infrastructure with Saline Habitat Complex alternative was developed in response to concerns expressed by some Committee members at the December 8, 2005 meeting. The alternative is similar to, but has less constructed habitat than the Maximize Saline Habitat Complex alternative, and with somewhat less complexity. The alternative would provide created saline habitat areas in the southern and northern portions of the Salton Sea to replace the eventual loss of the Sea's existing shallow water and shoreline habitat. The alternative includes a marine sea of about 15,000 acres and about 50,000 acres (gross) of saline habitat complex. Volume and cost estimates are under preparation.

- **Additional Alternatives, SSA's Revitalization Plan and the Imperial Group's Concentric Lakes Concept** —The Committee discussed the possible inclusion of the SSA's Revitalization Plan as described by the SSA, in the range of alternatives. Many Committee members noted that the SSA's plan should be considered as one of the alternatives, and it should be analyzed under the same or similar assumptions as the other alternatives to allow for comparison among all of the alternatives. Various Committee members noted that the Imperial Group's Concentric Lakes Concept should also be included in the range of alternatives.

The Committee discussed the inclusion of these three alternatives in detail and voted to include them in the ERS and PEIR. Secretary Chrisman advised the SSA and Imperial Group that they must provide all the information that we require in a timely manner for analysis of their alternatives or we will not be able to include those alternatives in the PEIR. DWR and DFG will coordinate with the SSA and the Imperial Group to obtain the necessary information as soon as possible.

Level of Detail in the PEIR

Due to limited time, this presentation was deferred to the March 16 Committee meeting.

Summary of Action Items

The next Advisory Committee meeting will be held on March 16, 2006 at the Metropolitan Water District of Southern California in Los Angeles.

Handouts

Copies of the following presentations and related materials:

- Update on Project Status and Schedule
- Update Inflow Assumptions

- Influence of Habitat Objectives on Final Alternatives
- Water Quality Management
- Proposed Final Range of Alternatives
- Level of Detail in the PEIR

ATTENDANCE

Advisory Committee Members or Alternates Present:

Greg Austin, U.S. Fish and Wildlife Service
Fred Cagle, Sierra Club
Celeste Cantu, State Water Resources Control Board
Michael Cohen, Pacific Institute
Kim Delfino, Defenders of Wildlife
Bill DuBois, California Farm Bureau Federation
Bill Gaines, California Waterfowl Association
Bob Ham, Imperial Valley Association of Governments
Rick Hoffman, Riverside County
Julia Levin, Audubon California
Al Loya, Torres-Martinez Desert Cahuilla Indians
Elliot Mulberg, Air Resources Board
Brad Poiriez, Imperial County Air Pollution Control District
Larry Purcell, San Diego County Water Authority
Tom Raftican, United Anglers of Southern California
Steve Robbins, Coachella Valley Water District
Pete Silva, The Metropolitan Water District of Southern California
Mike Walker, U.S. Bureau of Reclamation
Bruce Wilcox, Imperial Irrigation District
John Wohlmuth, Coachella Valley Association of Governments
Nancy Wright, Regional Water Quality Control Board
Gary Wyatt, Imperial County